This is a SOURCES SOUGHT synopsis. The US Army Corps of Engineers, Norfolk District, is seeing business sources that have the technical capability to provide services to Aerate the Fredericksburg Canal. The historic Fredericksburg Canal will no longer receive a free flow from the Rappahannock River. Since water will no longer flow freely into the canal after the Dam is removed, the water quality in the existing historic canal in Fredericksburg VA has to be maintained. The most promising alternative involves the use of an aeration/mixing system. The upstream end of the canal will be plugged, resulting in intermittent local stormwater runoff being the sole source of water into the canal, with minor input from a perennial stream that is currently discharging to the canal. Therefore, the canal will essentially function as a long, narrow retention pond. To keep the water in the canal from going anaerobic, it is proposed that an aeration system will be designed and installed. The canal is located in the residential areas of the City of Fredericksburg VA. It is approximately 10,500 feet in length, averages 55 feet in width along most of its length (70 feet at the most downstream end and 45 feet at the ost upstream end). Total volume of the canal is approximately 2.74 million cubic feet (20.5 million gallons) at elevation 48.75. The basic requirements are to prevent stagnation that a system be designed that will introduce continuous air into the long narrow canal. Dissolved Oxygen requirement is 5 mg/l. This is NOT a request for proposals or an invitation to bid. Interested businesses that are capable of designing and providing the required aeration system are invited to provide responses to this notice not later than _____ to US Army Corps of Engineers, Norfolk District, CENAO-SS-C (ATTN S. Hurst), 803 Front Street, Norfolk VA 23513. Responses should demonstrate the capability to perform the work described and information concerning the aeration system that is contemplated for use. The point of contact is Susan Hurst, 757-441-7747, 757-441-7183 fax, susan.i.hurst@usace.army.mil. Additional information concerning this project can be found at http://www.nao.usace.army.mil/Ebs/AdvertisedSolicitations.asp

Request for Services to Aerate Frederickburg canal

Background:

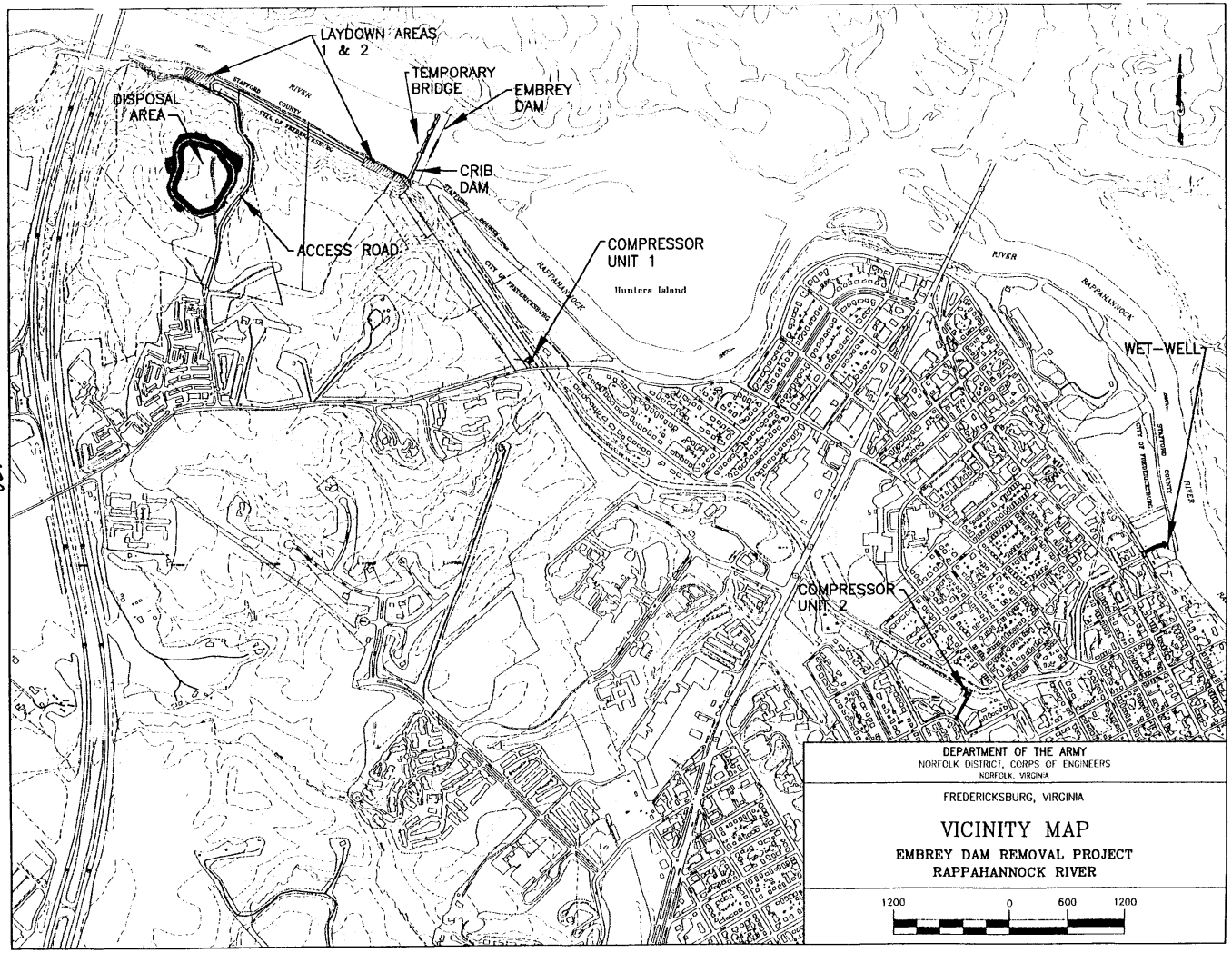
The historic Fredericksburg canal will no longer receive a free flow from the Rappahannock River. Since water will no longer flow freely into the canal after the Dam is removed, the water quality in the existing historic canal in Fredericksburg has to be maintained. The most promising alternative involves the use of an aeration/mixing system. The upstream end of the canal will be plugged, resulting in intermittent local stormwater runoff being the sole source of water into the canal, with minor input from a small perennial stream that is currently discharging to the canal. Therefore, the canal will essentially function as a long, narrow retention pond. To keep the water in the canal from going anaerobic, it is proposed that an aeration system will be designed and installed.

The following information briefly describes the canal:

The canal is located in the residential areas of the City of Fredericksburg. It is approximately 10,500' in length, averages 55' in width along most of its length (70' at the most downstream end and 45' at the most upstream end), and averages 7' to 10' deep (5' deep at the most upstream end). Total volume of the canal is approximately 2.74 million cubic feet (20.5 million gallons) at elevation 48.75.

Work Requirements:

In order to prevent stagnation, design and construct an aeration system that will introduce continuous air into the long narrow canal. Dissolved Oxygen requirement is 5 mg/l.


LAYDOWN AREAS
1 & 2
TEMPORARY
BRIDGE
EMBREY
DAM
DISPOSAL
AREA
CRIB
DAM
ACCESS ROAD
COMPRESSOR
UNIT 1
Hunters Island
WET-WELL
COMPRESSOR
UNIT 2
RIVER
RAPPAHANNOCK
STAFFORD
COUNTY
CITY OF FREDERICKSBURG
DEPARTMENT OF THE ARMY
NORFOLK DISTRICT, CORPS OF ENGINEERS
NORFOLK, VIRGINIA
FREDERICKSBURG, VIRGINIA
VICINITY MAP
EMBREY DAM REMOVAL PROJECT
RAPPAHANNOCK RIVER
1200
0
600
1200